

Multi-Standard Modulator with IF and Digital Output

- Supports many modulation standards
- 36-MHz IF and digital I/Q outputs
- Bi-directional DVB-ASI port

FEATURES

- Multi-standard modulator with support for most QAM-, OFDM- and VSB-based modulation standards
- Supports all constellations and modulation modes for each supported standard
- Two user-configurable IF outputs; real and imaginary output facilitating quadrature upconversion
- IF outputs are lightly filtered enabling off-board high-quality filtering
- Digital baseband I+Q outputs
- Bi-directional DVB-ASI port
- Programming interface (DTAPI) is fully compatible with other DekTec digital-video output adapters
- PCI rev 2.2, 32 bit, 33 or 66MHz bus



APPLICATIONS

- Digital I/Q generator
- High-fidelity modulator
- IF output for your (OEM) application

KEY ATTRIBUTES

| Parameter | | Value |
|----------------------|-----------------|--------------------------------------|
| Modulation bandwidth | | 5.0 .. 8.0MHz |
| MER | | 41dB RMS (DVB-C) 42dB RMS (DVB-T) |
| IF output | Frequency | 36.0MHz ±1ppm |
| | Connector | 50-Ω BNC (2x) |
| | Return loss | ≥20dB (5 .. 70MHz) |
| | Level (QAM) | -11dBm ±1dB |
| | Level (OFDM) | -14dBm ±1dB |
| | Phase noise | <-115dBc @ 10kHz <-105dBc @ 1kHz |
| | Spectral purity | >40dB (0 .. 1GHz) |
| Digital output | Connector | 14-pins header |
| | Signal level | LVDS |
| | Data bus | 16-bit I+Q @ 36MHz |
| ASI | Connector | 75-Ω BNC |
| | Return loss | ≥15dB (5 .. 270MHz) |

MODULATION STANDARDS

| Modulation | Standard |
|---------------|--------------------------|
| ATSC VSB | ATSC A/53E |
| ADTB-T / DTMB | GB 20600-2006 |
| DVB-C | EN 300 429 |
| DVB-T / DVB-H | EN 300 744 |
| DVB-T2 | EN 302 755 |
| IQ | Direct I/Q sample payout |
| ISDB-T | ARIB STD-B31 |
| QAM | J.83 Annex A/B/C |

ORDERING INFORMATION

| Type | Description |
|--------------|--------------------------|
| DTC-370-ISDB | ISDB-T software option |
| DTC-374-DTMB | DTMB software option |
| DTC-376-CM | Channel-modelling option |
| DTC-378-T2 | DVB-T2 modulation option |

Several bundles are available, please refer to www.dektec.com